

What Is Claimed Is:

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1 1. A method for replacing an attachment to an email message with a
2 reference to a location of the attachment, comprising:
3 receiving the email message;
4 examining the email message to determine if the email message includes
5 an attachment; and
6 if the email message includes the attachment,
7 storing the attachment at a location on a communication
8 network from which the attachment can be retrieved,
9 modifying the email message by replacing the attachment
10 with a reference specifying the location of the attachment on the
11 communication network, and
12 sending the modified email message to a recipient of the
13 email message.

1 2. The method of claim 1, further comprising:
2 receiving the modified email message at the recipient; and
3 using the reference specifying the location of the attachment to retrieve the
4 attachment across the communication network.

1 3. The method of claim 2, wherein retrieving the attachment includes
2 authenticating the recipient to a computer system upon which the attachment is
3 stored.

1 4. The method of claim 1, wherein receiving the email message
2 includes receiving the email message at one of,

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3 an application residing on a computer system belonging to a sender of the
4 email message;
5 an email server through which the email message is sent;
6 a firewall that protects at least one trusted computer system from
7 communications across the communication network; and
8 a gateway that converts the email message from a first format to a second
9 format.

1 5. The method of claim 1, further comprising allowing the attachment
2 to be updated at the location on the communication network.

1 6. The method of claim 1, further comprising deleting the attachment
2 from the location on the communication network after at least one of:
3 an expiration of a time period;
4 sending a notification to recipients of the email message that the
5 attachment is to be deleted;
6 receiving a notification that all recipients of the email message have
7 retrieved the attachment;
8 receiving a notification that all recipients of the email message have
9 deleted the email message;
10 receiving a command to delete the attachment from a sender of the email
11 message; and
12 storing the attachment to archival storage.

1 7. The method of claim 1, wherein the communication network
2 includes at least one of:
3 a computer network; and

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~~a telephone network.~~

1 8. The method of claim 1, wherein if the email message includes the
2 attachment, the method further comprises:

3 asking a sender of the email message whether to replace the attachment
4 with the reference specifying the location of the attachment; and
5 replacing the attachment only if the sender agrees to replace the
6 attachment.

1 9. The method of claim 1, wherein the attachment is a file.

1 10. The method of claim 1, wherein the reference specifying the
2 location of the attachment includes a uniform resource locator (URL).

1 11. A computer-readable storage medium storing instructions that
2 when executed by a computer cause the computer to perform a method for
3 replacing an attachment to an email message with a reference to a location of the
4 attachment, the method comprising:

5 receiving the email message;
6 examining the email message to determine if the email message includes
7 an attachment; and
8 if the email message includes the attachment,

9 storing the attachment at a location on a communication
10 network from which the attachment can be retrieved,

11 modifying the email message by replacing the attachment
12 with a reference specifying the location of the attachment on the
13 communication network, and

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14 sending the modified email message to a recipient of the
15 email message.

1 12. The computer-readable storage medium of claim 11, wherein the
2 method further comprises:
3 receiving the modified email message at the recipient; and
4 using the reference specifying the location of the attachment to retrieve the
5 attachment across the communication network.

1 13. The computer-readable storage medium of claim 12, wherein
2 retrieving the attachment includes authenticating the recipient to a computer
3 system upon which the attachment is stored.

1 14. The computer-readable storage medium of claim 11, wherein
2 receiving the email message includes receiving the email message at one of,
3 an application residing on a computer system belonging to a sender of the
4 email message;
5 an email server through which the email message is sent;
6 a firewall that protects at least one trusted computer system from
7 communications across the communication network; and
8 a gateway that converts the email message from a first format to a second
9 format.

1 15. The computer-readable storage medium of claim 11, wherein the
2 method further comprises allowing the attachment to be updated at the location on
3 the communication network.

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1 16. The computer-readable storage medium of claim 11, wherein the
2 method further comprises deleting the attachment from the location on the
3 communication network after at least one of:
4 an expiration of a time period;
5 sending a notification to recipients of the email message that the
6 attachment is to be deleted;
7 receiving a notification that all recipients of the email message have
8 retrieved the attachment;
9 receiving a notification that all recipients of the email message have
10 deleted the email message;
11 receiving a command to delete the attachment from a sender of the email
12 message; and
13 storing the attachment to archival storage.

1 17. The computer-readable storage medium of claim 11, wherein the
2 communication network includes at least one of:
3 a computer network; and
4 a telephone network.

1 18. The computer-readable storage medium of claim 11, wherein if the
2 email message includes the attachment, the method further comprises:
3 asking a sender of the email message whether to replace the attachment
4 with the reference specifying the location of the attachment; and
5 replacing the attachment only if the sender agrees to replace the
6 attachment.

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1 19. The computer-readable storage medium of claim 11, wherein the
2 attachment is a file.

1 20. The computer-readable storage medium of claim 11, wherein the
2 reference specifying the location of the attachment includes a uniform resource
3 locator (URL).

1 21. An apparatus that replaces an attachment to an email message with
2 a reference to a location of the attachment, comprising:

3 an examination mechanism that examines the email message to determine
4 if the email message includes an attachment; and

5 a replacement mechanism, wherein if the email message includes the
6 attachment the replacement mechanism is configured to,

7 store the attachment at a location on a communication
8 network from which the attachment can be retrieved,

9 modify the email message by replacing the attachment with
10 a reference specifying the location of the attachment on the
11 communication network, and

12 send the modified email message to a recipient of the email
13 message.

1 22. The apparatus of claim 21, further comprising:

2 a second receiving mechanism at the recipient that is configured to receive
3 the modified email message; and

4 a retrieval mechanism at the recipient that is configured to use the
5 reference specifying the location of the attachment to retrieve the attachment
6 across the communication network.

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1 23. The apparatus of claim 22, wherein the retrieval mechanism is
2 configured to authenticate the recipient to a computer system upon which the
3 attachment is stored.

1 24. The apparatus of claim 21, wherein the replacement mechanism is
2 located on one of,
3 an application residing on a computer system belonging to a sender of the
4 email message;
5 an email server through which the email message is sent;
6 a firewall that protects at least one trusted computer system from
7 communications across the communication network; and
8 a gateway that converts the email message from a first format to a second
9 format.

1 25. The apparatus of claim 21, further comprising an updating
2 mechanism that is configured to allow the attachment to be updated at the location
3 on the communication network.

1 26. The apparatus of claim 21, further comprising a deletion
2 mechanism that is configured to delete the attachment from the location on the
3 communication network after at least one of:
4 an expiration of a time period;
5 sending a notification to recipients of the email message that the
6 attachment is to be deleted;
7 receiving a notification that all recipients of the email message have
8 retrieved the attachment;

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1 receiving a notification that all recipients of the email message have
2 deleted the email message;
3 receiving a command to delete the attachment from a sender of the email
4 message; and
5 storing the attachment to archival storage.

1 27. The apparatus of claim 21, wherein the communication network
2 includes at least one of:
3 a computer network; and
4 a telephone network.

1 28. The apparatus of claim 21, wherein if the email message includes
2 the attachment, the replacement mechanism is configured to:
3 ask a sender of the email message whether to replace the attachment with
4 the reference specifying the location of the attachment; and to
5 replace the attachment only if the sender agrees to replace the attachment.

1 29. The apparatus of claim 21, wherein the attachment is a file.

1 30. The apparatus of claim 21, wherein the reference specifying the
2 location of the attachment includes a uniform resource locator (URL).